Reply to Office Action of April 8, 2004

## Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

## **Listing of Claims:**

1. (currently amended) A method of processing a query in a system in an object oriented programming environment, comprising:

encoding an access request statement from an application into a structured query language statement with a JDBC;

using a [[code]] <u>base class</u> to create a condition filter in [[the]] <u>a</u> standard query language statement, the condition filter defining properties to be satisfied by a result of [[the]] <u>a</u> query, and the condition filter using an object to execute a precompiled query language statement, wherein a portion of data values in the condition filter are each replaced by a placeholder and a corresponding data value list for the placeholders is created using a tree data structure to store conditions;

precompiling the standard query language statement including the condition filter;

storing the precompiled standard query language statement;
receiving the query from an application including values for each of the data values represented by placeholders; and

using the precompiled standard query language statement including the received values from the application to request the result of the query from a database;

repeating the receiving and the using for another query, wherein the precompiled query language statement is executed multiple times without being recompiled.; and]]

sending the standard -query language statement to a database.

2. (currently amended) The method of processing a query according to claim 1, wherein data values in the condition filter are replaced with the placeholder is a question mark character and a corresponding data value list is

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## created.

- 3. (canceled)
- 4. (currently amended) The method of processing a query according to claim 1, wherein the [[code]] condition filter includes LIKE, AND, and OR operators.
- 5. (currently amended) The method of processing a query according to claim 1, wherein the [[code]] condition filter includes one of IS NULL and IS NOT NULL functions.
- 6. (currently amended) The method of processing a query according to claim 1, wherein the [[code]] <u>condition filter</u> includes one of UPPER, LOWER, and INITCAP functions.
- 7. (currently amended) The method of processing a query according to claim 1, wherein the [[code]] condition filter comprises TO\_DATE function.
- 8. (currently amended) The method of processing a query according to claim 1, wherein the [[code]] condition filter has parameters and none of the parameters is null.
- 9. (currently amended) A method of processing a query in a system in an object oriented programming environment, comprising:

encoding an access request statement from an application into a structured query language statement with a JDBC;

using an application programming interface (API) to create a standard query language (SQL) WHERE clause statement in the SQL statement and to pass the SQL WHERE clause statement to a persistent object framework (POF), wherein the API uses a tree data structure for storing conditions wherein data values of unknown parameters in the SQL WHERE clause statement are replaced with a question mark character and a corresponding data value list is created; [[and]]

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receiving a query from an application;

sending the SQL WHERE clause statement to the database,

wherein the SQL WHERE clause statement includes a condition filter and uses a PreparedStatement object that uses the tree data structure to set values of the unknown parameters unknown, and wherein the SQL WHERE clause statement is executed multiple times without being recompiled.

- 10. (canceled)
- 11. (canceled)
- 12. (currently amended) An application programming interface (API) for a database query system in an object oriented programming environment, the application programming interface adapted to effect the steps comprising:

receiving a structured query language statement generated by a JDBC from an access request statement of an application;

creating a condition filter for a standard query language (SQL) WHERE clause statement; and

passing the condition filter to a persistent object framework,

wherein the SQL WHERE clause statement uses a PreparedStatement object to request a query, and wherein the query is executed multiple times without being recompiled.

- 13. (previously presented) The API according to claim 12, wherein data values in the condition filter for a SQL WHERE clause statement are replaced with a question mark character and a corresponding data value list is created.
- 14. (currently amended) A computer program product comprising a computer useable medium having computer readable code embodied therein for a database query, the computer program product adapted to effect the steps comprising:

encoding an access request statement from an application into a structured query language statement with a JDBC;

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making a connection with a database;

using a code to create creating a condition filter in a standard query language statement, the condition filter defining properties to be satisfied by a result of [[the]] a query, and the condition filter using an object to execute a precompiled query language statement, wherein the query language statement is executed multiple times without being recompiled; and

[[sending]] <u>using</u> the standard query language statement to <u>request the</u> <u>result of the query from</u> the database, <u>wherein the using comprises responding</u> to an access request from an application, the access request including values of <u>parameters implemented in the standard query language statement by the object.</u>

- 15. (currently amended) The computer program product according to claim 14, wherein data values in the condition filter are replaced with a question mark character and a corresponding data value list is created, <u>data value list</u> being used to implement the parameter values from the application.
- 16. (currently amended) The computer program product according to claim 14, wherein the code includes a tree data structure is used for storing conditions, the tree data structure being accessible by the executing object for the condition filter to set the parameters with the parameter values.
- 17. (currently amended) The computer program product according to claim 14, wherein the [[code]] <u>condition filter</u> includes LIKE, AND, and OR operators.
- 18. (currently amended) The computer program product according to claim 14, wherein the [[code]] condition filter includes one of IS NULL and IS NOT NULL functions.
- 19. (currently amended) The computer program product according to claim 14, wherein the [[code]] <u>condition filter</u> includes one of UPPER, LOWER, and INITCAP functions.

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20. (currently amended) The computer program product according to claim 14, wherein the [[code]] condition filter includes TO\_DATE function.

- 21. (currently amended) The computer program product according to claim 14, wherein the [[code]] <u>condition filter</u> has parameters and none of the parameters is null.
- 22. (currently amended) A computer program product comprising a computer useable medium having computer readable code embodied therein for a database query, the computer program product comprising:

means for encoding an access request statement from an application into a structured query language statement with a JDBC;

means for using a code to create creating a condition filter in a standard query language statement;

means in the condition filter for defining properties to be satisfied by a result of the query, the defining properties means comprising a tree data structure for storing conditions relating to data values, wherein the data values in the condition filter are replaced with a question mark character and a corresponding data value list is created allowing retrieval of conditions from the tree data structure; and

means in the condition filter for using an object to execute a precompiled standard query language (SQL) statement, wherein the precompiled SQL statement is executed multiple times without being recompiled.

- 23. (canceled)
- 24. (canceled)